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SPOTTED ALFALFA APHID

The spotted alfalfa aphid (*Pterocallidium sp.*), first found in the United States in New Mexico in 1954, and for a time suspected to be the yellow clover aphid, has now spread into 14 States west of the Mississippi River, and an isolated infestation has been found in northern Florida. Already responsible for the destruction in the Southwest of alfalfa worth millions of dollars, this new insect is a serious threat to the crop wherever grown in this country.

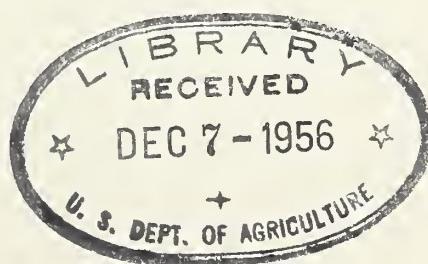
The aphid sucks the juice from the leaves, causing them to curl, turn yellow and drop. At the same time it may inject a toxin that kills young plants and retards the growth of older plants. It also secretes a large amount of honeydew on the plants that interferes with harvesting and drying and lowers the quality of the hay.

Two insecticides - malathion applied at the rate of 8 ounces per acre and parathion at 4 ounces - give satisfactory control of the aphid and have been widely used. However, reinfestation occurs when winged forms of the aphid enter the treated fields from outside, and several insecticide applications are generally necessary to protect a single cutting of alfalfa.

Research aimed at better control of the spotted alfalfa aphid is in progress by the U. S. Department of Agriculture and a number of State agricultural experiment stations. One of the most promising approaches to the problem is the development of a variety of alfalfa resistant to the aphid. A new variety Lahontan, adapted to Nevada and northern California, has already shown considerable resistance and should serve as a valuable source of resistance germ plasm in the development of resistant varieties adapted to other parts of the country. Parasites and predators of the aphid are also being investigated. They may aid materially in its control.

Bibliography (over)

AP107 (6-56)



BIBLIOGRAPHY OF FORAGE INSECTS

State Publications

California Extension Service, 1956 - University of California Recommendations for Insect and Spider Mite Control on Alfalfa Seed.

Hilgardia, California Experiment Station 24(5): 93-118 - The Spotted Aphid (Yellow Clover Aphid on Alfalfa)

Connecticut Experiment Station Circular 197 - The Forage Insect Problem.

Maryland Extension Service Fact Sheet 87 - Spraying Hay Crops for Insects.

Montana Extension Service, Ext. Leaflet 4, rev. - Alfalfa Weevil.

Nebraska Extension Service, E.C. 55-1574 - Control Sweetclover Weevils.

Oklahoma Extension Service Leaflet L-4 - The Spotted Alfalfa Aphid.

Oklahoma Experiment Station Bul. B-469 - Research on the Spotted Alfalfa Aphid.

Utah Extension Service Leaflet 8 - Spotted Alfalfa Aphid.

Utah Experiment Station Circular 135 - Growing Alfalfa for Seed.

Washington Agri. Experiment Station Bul. 555 - Insect Pollination in Relation to Alfalfa Seed in Washington (State)

Washington Extension Service Circular 226 - Pest Control and Pollination Recommendations for Alfalfa Seed Crops.

(Copies available from issuing State - please do not write us)

USDA Publications

ARS 33-11 - The Yellow Clover Aphid

ARS Leaflet 368 - The Alfalfa Weevil - How to Control it. (rev. June 1956)

(Request above USDA publications from Distribution Section, Federal Extension Service, USDA)

